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HEWLETT-PACKARD COMPANY  
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Fort Collins, CO 80527-2400

EXAMINER
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HERBST, RACHEL M

ART UNIT	PAPER NUMBER
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2174

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/697,937

**Applicant(s)**ADAMS, GUY DE WARRENNE  
BRUCE**Examiner**

R. M. Herbst

**Art Unit**

4121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**Detailed Action**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Response to Amendment and Arguments***

Claims 1, 4 - 20, 24, 27, 31-32 have been amended.

Claim 21 has been cancelled.

Claim 34 has been added.

Claims 1-34 are now pending.

2. Applicant's amendment filed December 20, 2007 has overcome rejection 35 USC 112, second paragraph of claim 16.

3. Applicant's title overcome's objection.

4. Applicant's arguments filed December 20, 2007 have been fully considered but they are not persuasive.

i.) Applicant amended independent claims directed now to customization of an interface device to a storage medium. Applicant argues this is a contrast to the technique disclosed in WO 02/07122 relating to a remote customized to devices such

as TVs or DVD players. This argument is not persuasive as there is no explicitly defined distinction between the various storage media.

ii.) Applicant argues with respect to claim 25, virtual symbols are not readable on the claimed symbols which are permanent and printed on the interface device. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Escobosa as applied to claim 24 and further in view of Allport. Applicant's argument is not persuasive as Allport is used as a supplementary reference to teach at least some of the symbols are text or graphical representations of the content of respective *said audio tracks* (Allport, col. 26, par 1 where the track data from a respective record is downloaded into the remote and the corresponding symbols are in both text and graphical see display of the remote. Fig 9). The motivation to combine the two references is to allow the user to choose which audio track to play based on its title. (Allport col. 25 par4).

iii.) Applicant argues with respect to claims 26-27, the remote control of (WO 02/07122) is bulky and not the type that can be printed on. This argument is not persuasive as 'bulky' is undefined, the two references do not cancel each other, in fact, Herbst's technique of printing directly to an interface device used in Escobosa's method of customizing an interface device would have been economically beneficial (Herbst, par. 5).

Accordingly, THIS ACTION IS MADE FINAL. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11, 14- 24 and 28-33 35 are rejected under U.S.C. 103(a) as being unpatentable over by Escobosa ("Escobosa", WO 0207122)

**As per claim 1**, Escobosa teaches Apparatus for customizing a user interface device to a storage medium having records stored thereon, the user interface device having user input regions identified by respective symbols, and operatively associated with the respective input regions, respective computer instructions for generating command signals for selecting respective said records by controlling at least one respective function of a remote target device, said apparatus being arranged to (Escobosa, page 3, lines 23-29, i.e. customizable remote control its with programmable functions and corresponding keys and Escobosa discloses page4, lines 4- 13, a customized consumer electronic device wherein a user selects among a plurality of functions performable by the consumer electronic device, and creates a virtual configuration for the device Where the plurality of functions performable by the consumer electronic device includes a DVD player. Furthermore figs 11 and 14 disclose functionality associated with selecting a record):

receive control function selection, information relating to at least one said function for inclusion in the interface device; (Escobosa discloses page4, lines 4- 13, a customized

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consumer electronic device wherein a user selects among a plurality of functions performable by the consumer electronic device, and creates a virtual configuration for the device).

in accordance with the control function selection information, access from a location remote from the interface device computer instructions corresponding to a selected said at least one function, including respective said computer instructions for generating command signals for selecting respective said records (page 4, lines 4-13, wherein the functions include control functions for controlling another consumer electronic device, see also page 4, lines 14-21 Where the plurality of functions performable by the consumer electronic device includes a DVD player or an interactive TV. Furthermore figs 11, 14, and 16 disclose functionality associated with selecting a record); receive layout selection information relating to a layout of the user interface device(Escobosa discloses in Page 7 line 26 through- page 8 line 20, where the table of functions presented to the user comprises a subset of all possible available functions displayed to the user as a selectable representation of the key layout is interpreted to mean layout selection).

Escobosa does not explicitly teach the following within the same embodiment applied above: based on contents of respective said records, generate symbols for identifying respective said records selectable by respective said user input regions. However Escobosa does teach this in a different embodiment (page 15 lines 15-25 a user downloads a logo/icon for display on the remote, together with a numeric code to be transmitted to the interactive TV when that icon is touched. Fig. 16 shows an example

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icon labeled "Desert Antics" this is interpreted to mean based on contents of respective said records, generate symbols for identifying respective said records selectable by respective said user input regions).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide symbols identifying records, both disclosed by Escobosa. The motivation would have been to facilitate a user being able to tune to a particular program or application using a remote (Escobosa page 14 line 30-page 15 line 3) and in accordance with the layout selection information, (a) produce an association file associating said computer instructions with respective said user input regions, (Escobosa discloses in Page 8, lines 3-24 when completed the computer then downloads the user's custom configuration into the remote this is interpreted to mean an file with associations is downloaded) and (b) initiate printing of the symbols. (Escobosa discloses in Page 8, lines 11-24 a label set may be printed following configuration).

**As per claim 2**, Escobosa teaches an apparatus as claimed in claim 1, wherein the at least one said function is selected from the following operating functions:

play, move forward, move back, stop, pause, volume, on/off, change channel, select specific track or other record on a specific storage medium, zoom, rotate, slide show mode, edit red-eye, and further edit image functions. (Escobosa, fig 5b shows a list of functions including channel changing and other edit image functions like sharp, hue, bright, color, etc.)

**As per claim 3**, Escobosa teaches an apparatus as claimed in claim 1, wherein the at least one function includes at least one of: selecting a said target device and initiating communication with a said target device. (Escobosa discloses this in page 10 line 24- page 11 line 18 where the code is first downloaded into the remote to allow the user to determine via experimentation if it is applicable is interpreted to mean an initiation of communication with target device)

**As per claim 4**, Escobosa teaches an apparatus as claimed in claim 1, comprising a customization interface arranged to display the symbols in the selected layout to be printed (Escobosa discloses this in fig 1, items 60, 64 showing a display with the customization interface and items 115, 114 shows a customization interface arranged to display the symbols in the selected layout to be printed).

**As per claim 5**, Escobosa teaches an apparatus as claimed in claim 1, comprising a customization interface for enabling an operator to perform at least one of the following operations: identify a said function corresponding to computer instructions; select said computer instructions for inclusion on the interface device; select a configuration of each of the symbols; and control an arrangement of the symbols in a desired relative disposition. (Escobosa discloses this in fig 5b where the figure demonstrates for enabling an operator to perform at least one of the following operations: identify a said function corresponding to computer instructions; select said computer instructions for inclusion on the interface device; select a configuration of each of the symbols; and



control an arrangement of the symbols in a desired relative disposition).

**As per claim 6**, Escobosa teaches an apparatus as claimed in claim 1, arranged to cause the association file and the selected computer instructions to be transmitted for storage on said interface device. (Escobosa discloses in Page 8, lines 3-24 when completed the computer then downloads the user's custom configuration into the remote this is interpreted to mean arranged to cause the association file and the selected computer instructions to be transmitted for storage on said interface device)

**As per claim 7**, Escobosa teaches an apparatus as claimed in claim 1, wherein at least one of said user input regions in the selected layout corresponds to a plurality of user input sub-regions. (Escobosa discloses a user input region in the selected layout corresponds to a plurality of user input sub-regions in fig 5b)

**As per claim 8**, Escobosa teaches an apparatus as claimed in claim 1, including printer apparatus operable to print the symbols g directly onto a said interface device (Escobosa discloses this in fig 1 item 115 depicting the apparatus including a printer apparatus).

**As per claim 9**, Escobosa teaches an apparatus as claimed in claim 1, including at least one of the remote computer instructions stored thereon. (Escobosa discloses this in Page 3 lines 14-22 where a database including a plurality of functions for a consumer

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electronic device is provided).

**As per claim 10**, Escobosa teaches an apparatus as claimed in claim 9, wherein the remote computer instructions stored on said apparatus are accompanied by information for generating a respective predetermined symbol relating to an associated control function. (Escobosa discloses this in Page 3 lines 23-29 a plurality of Customized labels or in some embodiments, customizable labels corresponding to the plurality of configurable keys are included).

**As per claim 11**, Escobosa teaches an apparatus as claimed in claim 9, wherein at least one of the computer instructions is for generating command signals for causing a remote device to access remotely stored information that a producer of the interface device wishes a user of the interface device to access. (Escobosa discloses this in Page 4 lines 4-14 where the plurality of functions performable by the consumer electronic device includes a DVD player).

**As per claims 14 and 22**, Escobosa teaches both a memory and a Computer apparatus loaded with the memory storing a computer program for use in producing a user interface device customized to a storage medium having records stored thereon, the user interface device having user input regions identified by respective symbols, and operatively associated with the respective input regions, respective computer

instructions for use in controlling a remote target device, said computer program comprising computer executable instructions for causing computer apparatus to: create an association file linking (i) selected computer instructions, including respective computer instructions for generating command signals for selecting respective said records, obtained from a location remote from the interface device, with (ii) at least one said user input region; (Escobosa discloses in page 4, lines 4-13, wherein the functions include control functions for controlling another consumer electronic device, see also page 4, lines 14-21 Where the plurality of functions performable by the consumer electronic device includes a DVD player or an interactive TV. Furthermore figs 11, 14, and 16 disclose functionality associated with selecting a record. Page 8, lines 3-24 when completed the computer then downloads the user's custom configuration into the remote this is interpreted to mean a file including instructions and associations is generated on the computer and then downloaded to the device). Escobosa does not explicitly teach the following within the same embodiment applied above: based on contents of respective said records, generate a symbol symbolizing the records selectable by the computer instructions; However Escobosa does teach this in a different embodiment (Escobosa discloses this page 15 lines 15-25 a user downloads a logo/icon for display on the remote, together with a numeric code to be transmitted to the interactive TV when that icon is touched. Fig. 16 shows an example icon labeled "Desert Antics" this is interpreted to mean based on contents of respective said records, generate a symbol symbolizing the records selectable by the computer instructions); Therefore it would have been obvious to one of ordinary skill in the art at the time of

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invention to provide symbols identifying records, both disclosed by Escobosa. The motivation would have been to facilitate a user being able to tune to a particular program or application using a remote (Escobosa page 14 line 30-page 15 line 3). and generate a customization interface arranged to display the symbols in an arrangement for printing onto the interface device, wherein each symbol is disposed so as to correspond with at least one said user input region. (Escobosa discloses this in fig 5b where the figure demonstrates an operator being able to identify and select a function corresponding to a set of computer instructions, selecting at least one set of instructions for inclusion on the interface device, selecting the configuration of the symbol and controlling the arrangement of each symbol).

**As per claim 15**, Escobosa teaches a memory as claimed in claim 14, wherein the computer instructions are adapted to generate command signals for controlling at least one respective operating function of the remote target device, said operating function being selected from the following: play, move forward, move back, stop, pause, volume, on/off, change channel, select specific track or other record on a specific storage medium, zoom, rotate, slide show mode, edit red-eye, and further edit image functions. (Escobosa, fig 5b shows a list of computer instructions including functions for channel changing and other edit image functions like sharp, hue, bright, color, etc.)

**As per claim 16**, Escobosa teaches a computer program memory as claimed in claim 14, wherein the computer instructions are adapted to generate command signals for

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selecting a said target device and/or initiating communication with a said target device. (Escobosa discloses this in page 10 line 24- page 11 line 18 where the code is first downloaded into the remote to allow the .user to determine via experimentation if it is applicable is interpreted to mean an initiation of communication with target device)

**As per claim 17**, Escobosa teaches a memory as claimed in claim 14, wherein at least one said symbol is disposed so as to correspond with a plurality of mutually adjacent said user input regions, so as to indicate a larger user input region comprising said plurality of mutually adjacent said user input regions. (Escobosa, fig. 11 and fig. 14, item 128 shows wherein at least one said symbol is disposed so as to correspond with a plurality of mutually adjacent said user input regions, so as to indicate a larger user input region comprising said plurality of mutually adjacent said user input regions.)

**As per claim 18**, Escobosa teaches a memory as claimed in claim 14, wherein said computer executable instructions are adapted for causing the computer apparatus to generate a customization interface enabling an operator to perform at least one of the following operations: identify a control function corresponding to respective said computer instructions; (Escobosa discloses in Page 4, lines 4-13, the user selectable set of functions include control functions for controlling another consumer electronic device), select computer instructions for inclusion on the interface device; select a configuration of the symbols; and control an arrangement of the symbols in a desired

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relative disposition.(Escobosa discloses this in fig 5b where the user controls an arrangement or one or more symbols)

**As per claim 19**, Escobosa teaches a memory as claimed in claim 14, wherein said computer executable instructions are adapted for causing the computer apparatus to cause transmission of the association file and the selected computer instructions for storage on said interface device. (Escobosa discloses in Page 8, lines 3-24 when completed the computer then downloads the user's custom configuration into the remote)

**As per claim 20**, Escobosa teaches a computer program memory as claimed in claim 14, wherein said computer executable instructions are adapted for causing computer apparatus to initiate printing of the symbols in a predetermined arrangement, for marking said user input regions. (Escobosa discloses in Page 8, lines 11-24 a label set may be printed following configuration).

**As per claim 23**, Escobosa teaches a computer apparatus as claimed in claim 22, wherein the computer apparatus comprises a printer apparatus or a personal computer. (Escobosa discloses this in fig 1 item 115 depicting the apparatus including a printer apparatus).

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**As per claim 24**, Escobosa teaches an interface device, customized for use in controlling a selected target device to access records stored on a storage medium, the interface device comprising: a plurality of switches; a plurality of corresponding switch actuating regions; permanent symbols, corresponding to the target device's control functions respectively printed relative to said actuating regions; a controller for controlling the interface; a path arrangement operably connecting the switches with said controller; and transceiver apparatus for wireless communication with said target device, wherein said symbols identify a desired switch actuating region for generating and transmitting a command signal to the target device for accessing a selected record on said storage medium (Escobosa discloses this in Page 4 lines 4-14 where the plurality of functions performable by the consumer electronic device includes a DVD player or an interactive TV. Furthermore figs 11, 14, and 16 disclose functionality associated with selecting a record), the arrangement of the symbols having been customized specifically to said storage medium (Escobosa discloses this in fig 5b where the figure demonstrates an operator being able to identify and select a function corresponding to a set of computer instructions, selecting at least one set of instructions for inclusion on the interface device, selecting the configuration of the symbol and controlling the arrangement of each symbol.) Escobosa does not explicitly teach the following within the same embodiment applied above: and based on contents of respective said records. However, Escobosa does teach this in a different embodiment (Furthermore page 15 lines 15-25 a user downloads a logo/icon for display on the remote, together with a numeric code to be transmitted to the interactive TV when that

icon is touched. Fig. 16 shows an example icon labeled "Desert Antics" this is interpreted to mean the arrangement of the symbols having been customized specifically to said storage medium and based on contents of respective said records). Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide symbols identifying records, both disclosed by Escobosa. The motivation would have been to facilitate a user being able to tune to a particular program or application using a remote (Escobosa page 14 line 30-page 15 line 3).

**As per 28**, Escobosa teaches a method of producing an interface device using an apparatus as claimed in claim 1, the method comprising feeding into printer apparatus an overlay sheet having a printable surface portion, so as to print said symbols in a predetermined arrangement onto said surface portion. (Escobosa shows this in fig 1, items 60, 64 showing a display with the customization interface and items 115,114 showing the labels are printed for the interface device).

**As per claim 29**, Escobosa teaches a method as claimed in claim 28, further comprising aligning the overlay in predetermined positional relationship with a blank interface device. (Escobosa, fig 8 shows aligning the overlay in a predetermined positional relationship.)

**As per claim 30**, Escobosa teaches an overlay made using a method as claimed in claim 28. (Escobosa, Page 8, lines 11-24 where the user may print a label set to be



installed on the remote or obtain a pad printed Mylar overlay).

**As per claim 3 I**, Escobosa teaches a method of customizing a user interface device to a storage medium having records stored thereon, the user interface device having user input regions identified by respective symbols, and operatively associated with the respective input regions, respective computer instructions for generating command signals for selecting respective said records by controlling at least one respective function of a remote target device, the method comprising: receiving control function selection information relating to at least one said function for inclusion in the interface device; (Escobosa discloses in Page 4, lines 4-13, the user is allowed to select among a plurality of functions performable by the consumer electronic device see also page 4, lines 14-21 Where the plurality of functions performable by the consumer electronic device includes a DVD player or an interactive TV. Furthermore figs 11, 14, and 16 disclose functionality associated with selecting a record) in accordance with the control function selection information, accessing from a location remote from the interface device computer instructions corresponding to a selected said at least one function, including respective said computer instructions for generating command signals for selecting respective said records; (Escobosa discloses in Page 4, lines 4-13, the functions include control functions for controlling another Consumer electronic device. See also page 4, lines 14-21 where the plurality of functions performable by the consumer electronic device includes a DVD player or an interactive

TV. Furthermore figs 11, 14, and 16 disclose functionality associated with selecting a record).

receiving layout selection information relating to a layout of the user interface device; (Escobosa discloses in Page 7 line 26 through- page 8 line 20, where the table of functions presented to the user comprises a subset of all possible available functions displayed to the user as a selectable representation of the key layout is interpreted to mean layout selection).

Escobosa does not explicitly teach the following within the same embodiment applied above: based on the contents of respective said records, generating symbols for identifying respective said records selectable by respective said user input regions;

However, Escobosa does teach this in a different embodiment: (Escobosa discloses in fig 5b, page 8, lines 3-24 and page 14 lines 19-29 the user may configure the shapes, sizes and layouts from a dynamically selectable list of browsable layouts and print a label set to be installed on the remote as well page 15 lines 15-25 a user downloads a logo/icon for display on the remote, together with a numeric code to be transmitted to the interactive TV when that icon is touched. Fig. 16 shows an example icon labeled "Desert Antics"). Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide symbols identifying records, both disclosed by Escobosa. The motivation would have been to facilitate a user being able to tune to a particular program or application using a remote (Escobosa page 14 line 30-page 15 line 3).

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And in accordance with the layout selection information, (i) producing an association file associating said computer instructions with respective said user input regions, (Escobosa discloses in Page 8, lines 3-24 when completed the computer then downloads the user's custom configuration into the remote this is interpreted to mean an file with associations is downloaded) and (ii) initiating printing of the symbols. (Escobosa discloses in Page 8, lines 11-24 a label set may be printed following configuration).

**As per claim 32**, Escobosa teaches a method of customizing a user interface device to a storage medium having records stored thereon, the interface device having user input regions arranged for causing respective computer instructions to be processed on the interface device so as to generate respective command signals for selecting respective said records by controlling a remote device; the method comprising; enabling an operator to identify and select desired computer instructions corresponding to desired control functions for controlling the remote device including respective said computer instructions for generating command signals for selecting respective said records; (Escobosa discloses in Page 4, lines 4-13, the user selectable set of functions include control functions for controlling another consumer electronic device, see also page 4, lines 14-21 Where the plurality of functions performable by the consumer electronic device includes a DVD player or an interactive TV. Furthermore figs 11, 14, and 16 disclose functionality associated with selecting a record). causing the selected computer

instructions to be transmitted to the user interface device for storage thereon; (Escobosa discloses in Page 8, lines 3-24 when completed the computer then downloads the user's custom configuration into the remote) receiving information relating to a disposition of the user input regions on the user interface device; and (Escobosa, fig 5b shows a user selecting the arrangement of a user input region on the user interface device, and in Page 8, lines 3-24 when completed the computer then downloads the user's custom configuration into the remote) printing onto a surface of the user interface device, (Escobosa discloses this in fig 1, items 60, 64 showing a display with the customization interface and items 115, 114 showing the labels are printed for the interface device wherein the labels are interpreted to be a surface of the interface device) in alignment with respective ones of said user input regions of the user interface device (fig. 8 shows the labels are printed in alignment), symbols respectively corresponding to the selected computer instructions, Escobosa does not explicitly teach the following within the same embodiment applied above: including symbols that are based on contents of respective said records and identify respective said records selectable by respective said user input regions. However, Escobosa does teach this in a different embodiment (fig. 5b and 8 item 108 shows the symbols the symbols correspond to the selected set of computer instructions and furthermore page 15 lines 15-25 a user downloads a logo/icon for display on the remote, together with a numeric code to be transmitted to the interactive TV when that icon is touched. Fig. 16 shows an example icon labeled "Desert Antics"). Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide symbols identifying records,

both disclosed by Escobosa. The motivation would have been to facilitate a user being able to tune to a particular program or application using a remote (Escobosa page 14 line 30-page 15 line 3).

**As per claim 33**, Escobosa teaches a method as claimed in claim 32, wherein the relative dispositions and sizes of the symbols are dynamically selectable (Escobosa discloses in the Page14 lines 19-29 the shapes, sizes and layouts are dynamically selectable from a list of browsable layouts) at least one of the user input regions being dynamically arranged from a plurality of smaller user input regions.(Escobosa discloses this in fig. 5b where a portion of the user input region of the remote interface is dynamically configured from the selectable plurality of smaller buttons of the provided by the table on the right)

5.) Claim 25, is rejected under 35 U.S.C. 103(a) as being unpatentable over Escobosa as applied to claim 24 above and further in view of Allport("Allport", US6882299)

**As per claim 25**, Escobosa teaches an interface device as claimed in claim 24 herein said storage medium comprises an optical storage device, said target device comprises an optical storage device reader at least some of said control functions relate to selection of respective records (Escobosa discloses this in Page 4 lines 4-14 where the

plurality of functions performable by the consumer electronic device includes a DVD player, He also teaches this in fig. 15 where the items 126 and 128 disclose the capabilities of a remote for an audio player). He does teach the records are in the form of audio tracks stored on said optical storage device (Escobosa fig. 15 items 126, 128 have configurable buttons for accessing audio tracks). He does not explicitly teach at least some of the symbols are text or graphical representations of the content of respective said audio tracks. However Allport does teach this (Allport, col. 26, par 1 where the track data from a respective record is downloaded into the remote and the corresponding symbols are in both text and graphical see display of the remote. Fig 9). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply Allport's method which encompasses functions related to selection audio tracks with Escobosa's method. The motivation would have been to allow the user to choose which audio track to play based on its title. (Allport col. 25 par4)

7.) Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Escobosa and Allport as applied to claim 25 above, and further in view of Redford ("Redford", US 5757304)

**As per claim 34**, Escobosa as modified teaches an interface device as claimed in claim 25. Escobosa does not teach explicitly wherein said interface device is a flexible printed circuit board that has a printable surface portion formed integrally therewith, said

symbols are permanently and directly printed onto said surface portion, and said flexible printed circuit board contains thereon said switches, said controller, said path arrangement, and said transceiver apparatus. However, Redford does teach this (Redford, col. 1 par 5, col. 3 par. 3-5, col. 5 par. 6, and fig. 2B a remote control for controlling a host device such as a television or a personal computer includes a substrate having a circuit, printed content located adjacent to the circuit, fig. 2B printed content can be printed in all touch areas, an integrated circuit die supported by the substrate and connected to the conductive ink circuit, a signal transmitter, a thin battery. The microcontroller can be 20 mils thick and connected to the switches. The remote control can be substantially flexible if the substrate is formed of a conventional paper sheet is interpreted to mean wherein said interface device is a flexible printed circuit board that has a printable surface portion formed integrally therewith, said symbols are permanently and directly printed onto said surface portion, and said flexible printed circuit board contains thereon said switches, said controller, said path arrangement, and said transceiver apparatus). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Redford's thin printable flexible assembly with Escobosa's as modified. The motivation would have been to simply touch printed content and view associated information on a television or personal computer in a simple intuitive manner whereby the remote control may be recycled in a manner similar to the recycling of conventional paper products (Redford col. 2 pars. 1-3).

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8.) Claims 12, 13, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Escobosa as applied to claim 1 above, and further in view of Herbst("Herbst", DE19905561)

**As per claim 12**, Escobosa teaches a method of producing an interface device, comprising using the apparatus as of claim 1. Escobosa does not explicitly teach to print said symbols onto an interface device blank. However, Herbst does teach this (Herbst, par. 1 discloses a method to print directly on plastic smart cards containing an electronic module where this smart card is interpreted to be an interface device). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Herbst's method of printing directly to a smart card in Escobosa's method. The motivation would have been economically beneficial to be able to print directly on a completed smart card apparatus. (Herbst, par. 5).

**As per claim 13**, Escobosa teaches a method of producing a customized interface device for use with a predetermined storage medium having predetermined contents stored thereon in the form of records, (Escobosa discloses this in Page 4 lines 4-14 where the plurality of functions performable by the consumer electronic device includes a DVD player) the method comprising inputting to an apparatus as claimed in claim 1 computer instructions for generating a command signal for selecting a respective one of said records, the computer instructions respectively including information for enabling said apparatus to generate a predetermined symbol relating to the respective said



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record, (Escobosa Page 3 lines 23- 29 a plurality of customized labels or in some embodiments, customizable labels corresponding to the plurality of configurable keys are included which is interpreted along with common knowledge at the time of this invention a control set of a DVD player contains track selection buttons), Escobosa does not explicitly teach and printing directly said symbol onto an interface device blank to obtain the customized interface. However, Herbst does teach this (Herbst, par. 1 discloses a method to print directly on plastic smart cards containing an electronic module where this smart card is interpreted to be an interface device). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Herbst's method of printing directly to a smart card in Escobosa's method. The motivation would have been economically beneficial to be able to print directly on a completed smart card apparatus. (Herbst, par. 5).

**As per claim 26**, Escobosa teaches a method of producing an interface device using an apparatus as claimed in claim 1. Escobosa also teaches the printing of symbols in a predetermined arrangement onto said surface portion. Escobosa does not teach the method comprising feeding into printer apparatus a blank interface device having a printable surface portion formed integrally therewith. Herbst does teach this (Herbst, par. 1 discloses a method to print directly on plastic smart cards containing an electronic module where this smart card is interpreted to be an interface device). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Herbst's method of printing directly to a smart card in

Escobosa's method. The motivation would have been economically beneficial to be able to print directly on a completed smart card apparatus. (Herbst, par. 5).

9.) Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Escobosa and Herbst as applied to claim 27 above, and further in view of Redford ("Redford", US 5757304)

**As per claim 27**, Escobosa as modified teaches a method as claimed in claim 26.

Escobosa as modified does not specifically teach the blank interface device is a flexible printed circuit board containing thereon a plurality of switches defining said user input regions; a controller for controlling the interface; a path arrangement operably connecting the switches with said controller; and transceiver apparatus for wireless communication with said remote target device. However, Redford does teach this (Redford, col. 1 par 5, col. 3 par. 3-5, col. 5 par. 6, and fig. 2B a remote control for controlling a host device such as a television or a personal computer includes a substrate having a circuit, printed content located adjacent to the circuit, fig. 2B printed content can be printed in all touch areas, an integrated circuit die supported by the substrate and connected to the conductive ink circuit, a signal transmitter, a thin battery. The microcontroller can be 20 mils thick and connected to the switches. The remote control can be substantially flexible if the substrate is formed of a conventional paper sheet is interpreted to mean a flexible printed circuit board containing thereon a plurality of switches defining said user input regions; a controller for controlling the interface; a path arrangement operably connecting the switches with said controller; and transceiver

apparatus for wireless communication with said remote target device). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Redford's thin printable flexible assembly with Escobosa's as modified. The motivation would have been to simply touch printed content and view associated information on a television or personal computer in a simple intuitive manner whereby the remote control may be recycled in a manner similar to the recycling of conventional paper products (Redford col. 2 pars. 1-3)

9. Applicant's arguments with respect to the pending claims as amended in the 20 December 2007 response have been fully considered but they are not persuasive.

***Action is Final***

10. **THIS ACTION IS FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. M. Herbst whose telephone number is (571)270-5132. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571)272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

rmh

/David A Wiley/

Supervisory Patent Examiner, Art Unit 2174